ELSEVIER

Journal of Hydrology 242 (2001) 302

Journal of Hydrology

www.elsevier.com/locate/jhydrol

Contents of Volume 242

Vol. 242 Nos. 1–2 **February 15, 2001**

Research Papers

Water flow and solute mass flux in heterogeneous porous formations with spatially random porosity
A.E. Hassan 1

Estimation of depth averaged unsaturated soil hydraulic properties from infiltration experiments
Z.-Y. Zou, M.H. Young, Z. Li and P.J. Wierenga 26

Forest age-induced changes in evapotranspiration and water yield in a eucalypt forest
P.M. Cornish and R.A. Vertessy 43

Laboratory measurement of water imbibition into low-permeability welded tuff
M.Q. Hu, P. Persoff and J.S.Y. Wang 64

Prediction of optimal safe ground water yield and land subsidence in the Los Banos-Kettleman City area, California, using a calibrated numerical simulation model
K.J. Larson, H. Başağaoğlu and M.A. Mariño 79

Simulating dispersive mixing in large peatlands
A.S. Reeve, D.I. Siegel and P.H. Glaser 103

A water balance model to simulate drought in forested ecosystems and its application to the entire forested area in Switzerland
B. Zierl 115

A stochastic approach to short-term rainfall prediction using a physically based conceptual rainfall model
S. Sugimoto, E. Nakakita and S. Ikebuchi 137

Vol. 242 Nos. 3–4 **February 28, 2001**

Research Papers

Regional flood frequency analysis based on a Weibull model: Part 1. Estimation and asymptotic variances
J.-H. Heo, D.C. Boes and J.D. Salas 157

Regional flood frequency analysis based on a Weibull model: Part 2. Simulation and applications
J.-H. Heo, J.D. Salas and D.C. Boes 171

Exploring an aquifer system by integrating hydraulic, hydrogeologic and environmental tracer data in a three-dimensional hydrodynamic transport model
N. Mattle, W. Kinzelbach, U. Beyerle, P. Huggenberger and H.H. Loosli 183

Vegetation changes and groundwater abstraction in SW Doñana, Spain
J.C. Muñoz-Reinoso 197

Assessment of uncertainty in simulation of nitrate leaching to aquifers at catchment scale
M. Thorsen, J.C. Refsgaard, S. Hansen, E. Pebesma, J.B. Jensen and S. Kleeschulte 210

A comparative analysis of the flooding and fire effects on the energy exchange in a wetland community (Morichal) of the Orinoco Llanos
J.J. San José, M.L. Meirelles, R. Bracho and N. Nikonova 228

Hydrograph separation using isotopic, chemical and hydrological approaches (Strengbach catchment, France)
B. Ladouche, A. Probst, D. Viville, S. Idir, D. Baqué, M. Loubet, J.-L. Probst and T. Bariac 255

Does a large number of parameters enhance model performance? Comparative assessment of common catchment model structures on 429 catchments
C. Perrin, C. Michel and V. Andréassian 275